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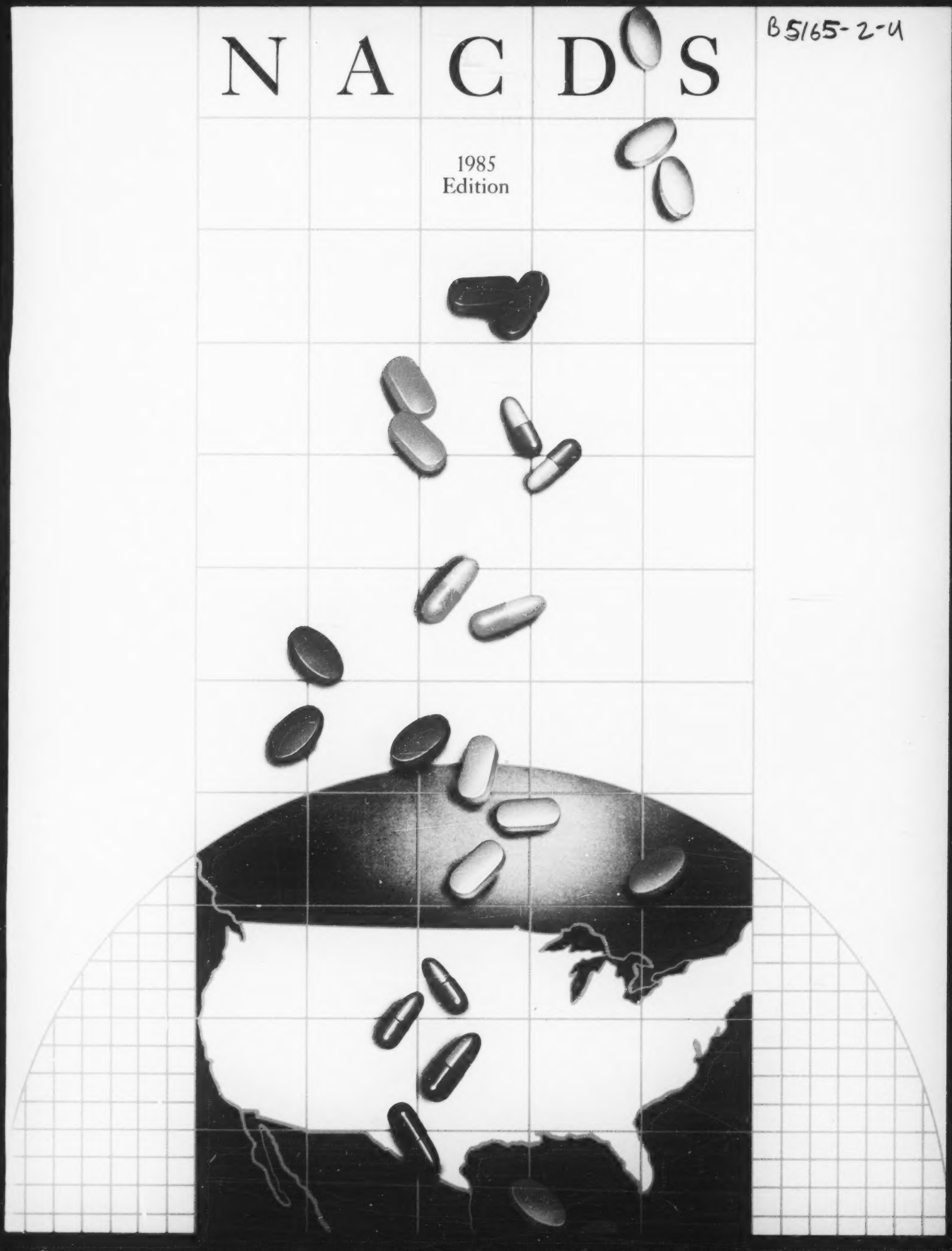

A summary of the 1984 operations of 1,282 chain operations

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Eli Lilly and Company
General Offices and Principal Laboratories
Indianapolis, Indiana 46285

Editor: Carl H. Deiner, R.Ph.
Art Editor: Charles Russell
Technical Assistance: Jeanne Sutton
Grace Witte
Linda Lanz

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Foreword

The 1985 edition of the NACDS-LILLY DIGEST presents operating statistics received from chain pharmacies throughout the United States. The DIGEST is designed as a tool pharmacy managers may use to evaluate an individual unit's performance and to plan for the future.

Many tabulations are similar to those found in previous issues; however, this year's edition contains several new sections. These include:

—A discussion of the concepts involved in calculating the cost of dispensing a prescription.

—A special report on the distribution of profitability among chain outlets.

—A five-year forecast of pharmacy operations.

The section entitled "Executive Summary" on pages 4 and 5 offers an overview of current operating trends. Since the chain drug industry is quite diverse in its orientation, pharmacies must be arranged according to some understandable variables if their statistics are to be used for comparative purposes. Therefore, the "Self-Analysis" section (pages 25 through 31) presents average operating statistics classified by total annual sales and pharmacy prescription activity. Further financial data are summarized by pharmacy location and geographic region.

Eli Lilly and Company is delighted to provide this publication to all who are interested in chain pharmacy practice. With the cooperation of the National Association of Chain Drug Stores, Inc., its board of directors, and the participating members, this edition was made possible.

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Executive Summary

The average NACDS-LILLY DIGEST pharmacy passed another milestone during 1984 by exceeding $2 million in total sales—a gain of 14.5% from the previous year (Table 1). This growth rate was significantly higher than the average annual growth rate of 9.5% for the last decade. However, the cost of goods sold was higher in 1984, with the result that gross margin declined to 28% of sales. This was the lowest gross margin percentage in the history of the DIGEST. The reduction in total expenses was not sufficient to offset the fall of gross margin; therefore, profit retreated to 4.7% of total sales (down from 5.1% in 1983).

The 1,282 pharmacies that contributed 1984 data established a record average sales figure of almost $2,284,000. Prescription sales grew 14.3% over 1983 income, the result of a 3.5% increase in the number of prescriptions dispensed coupled with a 10.5% rise in the average prescription charge. Percentagewise, prescription revenue accounted for the same share of total sales as in 1983. "Other" sales posted the largest increase in terms of both dollars and as a percent of sales in NACDS-LILLY DIGEST history—a gain of over $220,000 and 14.5% respectively.

The total wage package (manager's salary plus employees' wages) traditionally represents the greatest portion of expenses and, as such, indicates the importance of adequate control of its cost. This year, the figure fell slightly— to 10.4% of sales, the lowest level ever reported by DIGEST participants. Dollarwise, however, the increase in the employees' wages portion of the total wage package was the highest ever, over $25,000. The rise in employees' wages may be explained, in part, by the increase in employed pharmacist hours worked per week and the increase in the number of hours the stores were open for business.

Miscellaneous operating expenses (those within the braces in Table 1) showed an increase in dollars but declined to 10.3% from 10.5% of sales for 1983. Although greater dollar amounts were reported, no significant changes occurred in miscellaneous operating costs during the year. The headquarters fee was slightly lower, at 2.8% of sales, as compared with 2.9% for 1983. This statistic represents charges to the individual chain unit that are derived from allocation of expenses incurred by the central headquarters. It is interesting to note that warehouse fees also went down—from 2.4% to 1.7% of sales.

Rent advanced 0.1% to 2.6% of sales during 1984. Dollarwise, chain drugstores posted a 19.3% increase in rental expense over the previous year. The average rental rate rose to $6.50 per square foot, as compared with $6.28 in 1983.

The increase in average floor area to 9,132 square feet for 1984 is similar to the change observed in previous editions of the NACDS-LILLY DIGEST. Sales generated from the larger floor area continued the overall upward trend in total sales per square foot that began in 1971. However, prescription sales per square foot in the professional area declined for the first time. This may be explained, in part, by the increase in the size of the average prescription department during 1984.

The total value of inventory grew to just over $300,000 for the first time but dropped to 13.4% of sales. This level of inventory investment was the lowest percentage ever recorded in the DIGEST. As a result, inventory turnover increased to 5.5 times. Sales per dollar invested in prescription inventory continued to rise, up from $11.84 in 1983 to $12.45. Sales per dollar invested in nonprescription merchandise also rose, as shown by a 6.3% increase (from $6.22 to $6.61—the same figure as reported for 1979).

Prescription activity increased 3.5% from the previous year's figure—an advance of more than 1,500 prescriptions, which established a new record of nearly 45,500 prescriptions dispensed. The ratio of new prescriptions to total prescriptions fell slightly. The increase in total prescription activity was accompanied by a higher average prescription charge, up $1.13 to $11.90.

TABLE 1 Current trends in chain pharmacy operations

AVERAGES PER PHARMACY	1984 (1,282 Pharmacies)		1983 (1,203 Pharmacies)		Amount and Percent of Change
SALES					
Prescription	$ 541,386	23.7%	$ 473,647	23.7%	+$ 67,739	14.3%
Other	1,742,231	76.3%	1,521,719	76.3%	+$220,512	14.5%
Total	$2,283,617	100.0%	$1,995,366	100.0%	+$288,251	14.5%
COST OF GOODS SOLD	1,644,992	72.0%	1,424,453	71.4%	+$220,539	15.5%
GROSS MARGIN	$ 638,625	28.0%	$ 570,913	28.6%	+$ 67,712	11.9%
EXPENSES					
Manager's salary	$ 33,935	1.5%	$ 31,827	1.6%	+$ 2,108	6.6%
Employees' wages	202,811	8.9%	177,318	8.9%	+$ 25,493	14.4%
Rent	59,371	2.6%	49,768	2.5%	+$ 9,603	19.3%
Utilities (including telephone)	26,902	1.2%	22,277	1.1%	+$ 4,625	20.8%
Insurance, licenses, and taxes (except on profit)	32,879	1.4%	32,141	1.6%	+$ 738	2.3%
Repairs	8,545	0.4%	6,192	0.3%	+$ 2,353	38.0%
Advertising	39,053	1.7%	33,055	1.7%	+$ 5,998	18.2%
Depreciation (except on buildings)	14,101	0.6%	11,507	0.6%	+$ 2,594	22.5%
Supplies	12,562	0.6%	10,725	0.5%	+$ 1,837	17.1%
Headquarters fee	64,774	2.8%	58,050	2.9%	+$ 6,724	11.6%
All other direct store expenses	37,288	1.6%	35,956	1.8%	+$ 1,332	3.7%
		10.3%		10.5%		
Total	$ 532,221	23.3%	$ 468,816	23.5%	+$ 63,405	13.5%
NET PROFIT (before taxes)	$ 106,404	4.7%	$ 102,097	5.1%	+$ 4,307	4.2%
Warehouse fee*	$ 36,001	1.7%	$ 32,417	2.4%	+$ 3,584	11.1%
As a percent of cost of goods sold		2.4%		3.3%		
Value of inventory at cost and as a percent of sales						
Prescription	$ 43,484	8.0%	$ 40,011	8.4%	+$ 3,473	8.7%
Other	263,554	15.1%	244,605	16.1%	+$ 18,949	7.8%
Total	$ 307,038	13.4%	$ 284,616	14.3%	+$ 22,422	7.9%
Annual rate of turnover of inventory	5.5 times		5.1 times			
SIZE OF AREA*	sq. ft.		sq. ft.			
Prescription	451	4.9%	424	5.4%	+ 27	6.4%
Other	8,681	95.1%	7,501	94.6%	+ 1,180	15.7%
Total	9,132	100.0%	7,925	100.0%	+ 1,207	15.2%
SALES PER SQUARE FOOT*						
Prescription	$1,155.13		$1,162.48		−$ 7.35	0.6%
Other	198.67		197.58		+$ 1.09	0.6%
Total	245.81		243.90		+$ 1.91	0.8%
SALES PER DOLLAR INVESTED IN INVENTORY						
Prescription	$12.45		$11.84		+$ 0.61	5.2%
Other	6.61		6.22		+$ 0.39	6.3%
Net profit per dollar invested in inventory	$0.347		$0.359		−$ 0.012	3.3%
PRESCRIPTIONS DISPENSED						
New	23,591	51.9%	22,882	52.0%	+ 709	3.1%
Renewed	21,904	48.1%	21,085	48.0%	+ 819	3.9%
Total	45,495	100.0%	43,967	100.0%	+ 1,528	3.5%
PRESCRIPTION CHARGE	$11.90		$10.77		+$ 1.13	10.5%
NUMBER OF HOURS PER WEEK						
Pharmacy was open	83 hours		80 hours		+ 3	3.8%
Worked by manager	46 hours		46 hours			no change
Worked by employed pharmacist(s)	78 hours		70 hours		+ 8	11.4%

*Based on averages of pharmacies that reported all data

Cost of Dispensing a Prescription

How to Calculate the Cost of Dispensing Prescriptions

Kenneth W. Kirk, Ph.D.*

It has been some 30 years since the notion of fee for service relative to prescription dispensing was introduced. Central to this idea is the cost of dispensing and a method to determine it. Calculation of the profit margin to be added to the cost-of-dispensing figure to convert it to a dispensing fee is, of course, the final exercise. It has long been recognized that there is more than one way to calculate a pharmacy's cost of dispensing. The fact that there are numerous methods available explains why no trend data exist to track what has happened to prescription department operating expenses over the years.

Third-Party Interest in Cost of Dispensing

Considerable attention is being directed today to the determination of what it costs to dispense a prescription and how one goes about making such a calculation. Interest in "cost of dispensing" arises from the fact that federal guidelines for Medicaid reimbursement encourage state Medicaid agencies to utilize results of cost-of-dispensing surveys to determine what dispensing fee will be reimbursed to those pharmacies participating in their program.

The three elements of a prescription price are: (1) the acquisition cost of the dispensed drug product; (2) the operating expenses incurred by the pharmacy while dispensing the prescription; and (3) a profit component that represents an equitable return to the pharmacy for the time and investment involved in the dispensing of a prescription. A pharmacist must understand how all three elements will be determined before evaluating a particular third-party program.

Surprisingly enough, often there is confusion about just what the cost of dispensing represents. Cost of dispensing, simply stated, is a process of allocating operational costs to the prescription department of the pharmacy. However, when the concept was initially used in the 1970's, it typically was viewed as being synonymous with a dispensing fee. A separate profit component must be calculated and added to the cost of dispensing to arrive at a dispensing fee.

*Kenneth W. Kirk, Ph.D., Associate Dean and Clifford L. Klinck, Jr., Centennial Professor in Pharmacy Administration, College of Pharmacy, The University of Texas at Austin.

If a pharmacy manager used the cost of dispensing as the dispensing fee, the pharmacy would be operating only at its break-even point, and at the end of the year it would show neither a profit nor a loss in its prescription department operations.

Determining the Importance of the Prescription Department

The annual NACDS-LILLY DIGEST has illustrated for years the important contribution the prescription department makes to overall chain drugstore sales volume growth. The 1985 NACDS-LILLY DIGEST, for example, reveals that for the average chain pharmacy in its sample, the prescription department generated sales of $1,155 per square foot as compared with only $199 for other merchandise in the store. Also, the prescription department in the average chain pharmacy operation generates sales per dollar invested in inventory that are nearly double the comparable figure for nonprescription inventory. However, the percentage of prescription sales to total store sales varies greatly between low and high-volume chain operations.

Assessing the relative importance of the prescription department to other departments in the store is important when determining an equitable method to allocate expenses to the prescription department. Although it is possible to argue that many expenses should be allocated on the basis of floor area, this method ignores the importance of the prescription area in some types of chain operations.

It is important to recognize that NACDS-LILLY DIGEST data cannot be used to determine costs of dispensing because expenses associated with operating the prescription department are not available in the publication. A number of people have used both the LILLY DIGEST and NACDS-LILLY DIGEST to calculate cost of dispensing; however, results are likely to be inaccurate, and caution should be observed in using them when estimating what dispensing fees are or should be.

Types of Expenses to Be Allocated

Chain pharmacy operating expenses must be allocated to three categories when determining a store's cost of dispensing: (1) personnel who work in the prescription department; (2) nonpersonnel expenses that occur only within the prescription department, typically referred to as direct expenses; and (3) all remaining operating expenses allocated to the prescription department. The major portion of a pharmacy's cost

of dispensing, as much as 60% to 70% in some chain operations, will be represented by personnel expenses. Each of the three categories will be described separately.

Prescription Department Personnel Expenses

Prescription-related tasks can be separated into at least seven general categories: (1) receiving, filling, compounding, and dispensing prescription orders, including the maintenance of patient medication profiles; (2) providing drug-related information to patients in the pharmacy and to patients and other health professionals over the phone; (3) preparing, ordering, and checking in prescription drug inventory, including the time needed to stock the shelves and handle return-goods merchandise; (4) completing third-party prescription drug claim forms for submission for payment, verifying claims paid, and resubmitting claims not paid; (5) conducting annual inventory tallies, including controlled substances inventory and record keeping as required by law; (6) maintenance of accounts receivable for prescription drugs purchased on account; and (7) general maintenance of the prescription department work areas. The easiest way for managers to make time allocations is to estimate the percentage of each employee's time that is devoted to these tasks.

The total annual salary or wages paid to a given employee is multiplied by the percentage of time the employee spends on prescription-related activities. It is important to remember to include social security taxes, workman's compensation, and other fringe-benefit payments, such as the employer's share of employee health insurance premiums, with the employees' salary/wages.

The pharmacist-manager in some chain pharmacy operations is expected to devote a certain percentage of his time to activities outside the prescription department. The chain drug industry has two different philosophies regarding the role a pharmacist-manager plays in the store operation. Some chains prefer their store managers to be pharmacists and to spend considerable time in general merchandise activities away from the actual prescription department of the store. Other chains want their pharmacist-managers to manage only the prescription department and hire nonpharmacists to manage the entire store. These prescription department pharmacist-managers would have all of their salary allocated to prescription-related activities, because that is the only part of the store where they have management responsibilities. However, any allocation of time for an employed pharmacist outside the prescription department is questionable. Employed pharmacists are hired to work in the prescription department, and their salaries reflect their expertise. State pharmacy practice regulations recognize this expertise and require that only a licensed pharmacist can dispense prescriptions. It is only when no work is waiting to be done in the prescription department that employed pharmacists perform non-prescription-related tasks. In this sense, the salary or wages that employed pharmacists are paid should be viewed as a direct expense to the prescription department, and none of their time should be allocated to other areas. An exception to this would be employment of a pharmacist specifically to perform tasks outside the prescription department, which is unlikely since such work can be handled by employees who earn a considerably lower salary than a pharmacist. Treating employed pharmacist salaries as a direct expense is consistent with the fact that state pharmacy practice acts require a pharmacist to be on duty at all times when the prescription department is open.

Prescription Department Expenses

The next step is to identify all nonpersonnel expenses that occur solely within the operation of the prescription department. There are a small number of such expenses in a typical chain pharmacy. One of the more obvious is depreciation expenses for the fixtures and equipment used only in the prescription department. Other direct expenses include prescription containers and labels, licensure fees, and expenses associated with attending continuing education programs. Many chain pharmacies do not isolate the cost of prescription containers, thus making it a hidden cost to the business. Identifying these direct expenses is part of the departmentalization process, which is critical for maximizing the accuracy of any cost-of-dispensing calculation.

Nonprescription Related Expenses

Once all the personnel expenses have been allocated and the direct expenses associated with operating the prescription department have been isolated, the remaining operating expenses must be apportioned to the prescription department. There are two common methods of allocation—one is to use a ratio of prescription sales to total store sales, and the other is to employ a ratio of

square feet of prescription department to square feet of the total pharmacy.

One expense that should be handled in a unique manner is computer rental or depreciation on a computer if it has been purchased by the chain. Obviously, if the computer is used only in the prescription department, it is a direct expense and no allocation is necessary. However, some pharmacies also use a computer for activities unrelated to the prescription department, for example, ordering inventory for the entire pharmacy. Since the computer represents a significant expenditure, its expense should be allocated in a thoughtful manner. Basically, chain management needs to determine how much a program costs, then categorize each cost according to its use. Inventory ordering program costs should be allocated by a ratio of prescription sales to total sales, whereas third-party claims processing and patient-medication profile programs are direct expenses.

Most other expenses, including a store's headquarters fees, should be assigned according to the ratio of prescription sales to total sales, because this ratio represents an assessment of how important the prescription department is to the entire business. In the average NACDS-LILLY DIGEST pharmacy, this ratio is around 25%. Each store within a chain pharmacy operation must provide the funds to support the salaries of upper management and clerical staff who function in the chain's headquarters offices. These funds also must pay the operating expenses to those offices, which oftentimes are in a separate building. This store expense is referred to as the headquarters fee and it appears in the income statement just as any other operating expense. The method for determining how much each store will contribute to supporting the chain's upper management operation varies within the industry, but the allocation typically is related to sales volume.

There are a few expenses that are associated with the size of the pharmacy, primarily those for the building in which the pharmacy is housed. Thus, rent should be allocated according to the ratio of prescription department square footage to total store size, which is between 5% and 10% in the average NACDS-LILLY DIGEST pharmacy.

Converting a Cost-of-Dispensing Figure to a Dispensing Fee

Before determining the profit component of a prescription charge, chain management needs to develop a pricing method it believes is consistent with its business philosophy. Over the past two decades, considerable attention has been given to the professional fee concept, whereby a fixed amount is added to the drug cost to arrive at the selling price of the prescription. Although sound in theory from the perspective of a professional providing services to patients, it ignores the business reality of earning a return on investment.

A logical approach to pricing prescriptions may be to structure a graduated fee scale in which the fee increases as the cost of the drug product to the pharmacist goes up. Since the cost of dispensing is a fixed amount that should be recovered each time a prescription is dispensed, a graduated fee incorporates a variable net profit to determine the dispensing fee for a given prescription. With this pricing method, the prescription price would consist of the sum of three figures: (1) acquisition cost of the drug product being dispensed; (2) the cost of dispensing for the pharmacy; and (3) a percentage of the acquisition cost, representing the profit component. Of course, the chain can use whatever percentage figure considered competitive. It is not the intent of this article to recommend a particular figure or even to apply a percentage to the acquisition cost but rather to consider basing a profit component on the concept of return on investment.

When calculating cost of goods sold within a chain pharmacy operation, it is important to include the expenses incurred in getting the inventory to the pharmacy, commonly referred to as the chain's "landed" cost. The larger chains have their own warehouses, and expenses incurred in operating those warehouses must be paid by the individual stores. Headquarters fees are allocated as an operating expense to each store, whereas warehouse fees are included in the store's cost-of-goods-sold expense. This is because warehouse fees represent an inventory distribution cost that the chain would have to pay to manufacturers and drug wholesalers if it did not operate its own warehouse. For purposes of the following illustration on how to calculate a store's cost of dispensing prescriptions, it will be assumed that warehouse fees have already been included in the cost-of-goods-sold figure provided.

Illustration

Let's create a hypothetical pharmacy operation to illustrate how a cost-of-dispensing figure may be calculated by using the allocation methods just described. Franklin Sixth Street Phar-

macy is one of 26 pharmacies owned by Franklin Drug Chain, Inc. Last year, the pharmacy dispensed 72,000 prescriptions. The pharmacy has 9,000 square feet in total floor space, with the prescription department occupying 630 square feet (7%).

The Franklin chain employs three full-time and one part-time pharmacists. One of the full-time pharmacists earns a salary of $32,000, the other two earn $30,000, and the part-time pharmacist earns $12,800. (These salary figures include fringe benefits and payroll taxes.) In addition to the employed pharmacists, there is one clerk who works full time in the prescription department (40 hours per week) at an hourly wage of $8.25 (including benefits and payroll taxes). This clerk performs such tasks as filling out and submitting third-party claim forms and assisting the pharmacists during particularly busy times by entering data in the computer for purposes of label-making and recording for the patient-medication profile. The pharmacist-manager is paid a salary of $34,000, and he estimates that he spends 40% of his time on prescription-related activities.

Franklin Pharmacy's cost of dispensing can be calculated from information found in the income statement shown below. The actual calculation will be done in a stepwise manner to show how the various allocations are made.

FRANKLIN SIXTH STREET PHARMACY
Income Statement
for the Year Ending 1984

Prescription sales	$ 756,000	
Nonprescription sales	1,404,000	
Total sales		$2,160,000
Cost of goods sold (including warehouse fee)		1,512,000
Gross margin		$ 648,000
Operating expenses		
Manager's salary	$ 34,000	
Employees' wages	210,000	
Computer lease	9,000	
Prescription vials/labels	9,800	
Miscellaneous prescription department expenses	2,000	
Depreciation	16,000	
Rent	72,000	
Utilities (including phone)	32,000	
Insurance and taxes	36,500	
Repairs	8,000	
Advertising	37,500	
Supplies	21,500	
Headquarters fee	65,000	
All other direct store expenses	14,200	
Total expenses		$ 568,000
Net profit (before taxes)		$ 80,000

Step 1: Personnel Expenses Allocated to the Prescription Department

Franklin Sixth Street Pharmacy manager:
$34,000 × 40% $13,600

Employee pharmacists:
R.Ph. No. 1:
$32,000 × 100% $32,000
R.Ph. No. 2:
$30,000 × 100% 30,000
R.Ph. No. 3:
$30,000 × 100% 30,000
R.Ph. No. 4:
$12,800 × 100% 12,800

Clerk:
$8.25/hr × 40 hr/wk × 52 wks/year $17,160

Total personnel expenses $135,560

Step 2: Direct Prescription Department Expenses

Each Franklin chain store utilizes a computer to maintain its patient medication profiles and to prepare its third-party prescription claim forms for submission. These computers are leased at an annual cost of $9,000 for each store. Since the computer is used only in the prescription department, this is a direct expense and no allocation needs to be made.

Purchase records reveal that $9,800 was spent during the year for plastic vials and other prescription containers along with labels, printed prescription blanks for phoned prescription orders, and other materials needed to function in the prescription department.

Depreciation expense for the entire store was $16,000, but when it was determined solely for the prescription department fixtures and equipment, the amount was only $6,000.

Miscellaneous prescription department expenses were $2,000 and included malpractice insurance premiums, all pharmacy licenses required for dispensing legend drugs and controlled substances, and continuing education expenses for the pharmacists.

Total direct prescription department expenses $ 26,800

Step 3: Expenses Associated with the Building

Since the Franklin chain does not own the building in which any of its pharmacies are housed, their only building-related expense is

the rent. This allocation involves including 7% of the rent, since the prescription department occupies 7% of the total floor space in the pharmacy.

$72,000 × 7%	$ 5,040

Step 4: Expenses Allocated by Ratio of Prescription Sales to Total Pharmacy Sales

All of the remaining expenses are allocated to the prescription department by using the percentage of total sales that is for prescriptions, which is 35% for the Franklin Sixth Street Pharmacy. These expenses represent general operating expenses that occur as a result of simply operating the business, and the ability to pay them depends on the success of the pharmacy in generating the necessary revenue through sales.

Utilities	$ 32,500	
Insurance and taxes (does not include malpractice insurance)	36,500	
Repairs	8,000	
Advertising	37,500	
Supplies	21,500	
Headquarters fee	65,000	
All other direct store expenses	14,200	
Total expenses	$215,200	
$215,200 × 35%		$ 75,320
Total expenses allocated to the prescription department		$242,720
Cost of dispensing a prescription ($242,720/72,000 prescriptions)		$ 3.371

Step 5: Profit Earned on Prescription Sales

One of the goals of the Franklin chain officials at the beginning of the year for its Sixth Street Pharmacy was for the prescription department to generate a net profit equal to an 8.0% net markup on cost. The following calculation was made to see how close the pharmacy came to reaching that goal.

Average prescription price ($756,000 Prescription sales/ 72,000 Prescriptions dispensed)	$10.50
Gross margin for the prescription department (Records showed the gross margin was 37.5% for prescription sales)	$ 3.938
Cost of goods sold in the prescription department	$ 6.562
Net profit earned in the prescription department (Gross margin − cost of dispensing)	$ 0.567
Net markup on cost percentage ($0.567/$6.562)	8.6%
Net profit as a percentage of sales ($0.567/$10.50)	5.4%

Thus, Franklin Sixth Street Pharmacy has met its goal of 8.0% net markup on cost. Had Franklin chain officials wanted to utilize an average dispensing fee which would have generated an average 10% net markup on cost for the year, that average fee would have been $4.03. The calculation is as follows:

Average prescription ingredient cost = $6.562	
$6.562 × 10% net markup on cost	$ 0.656
Cost of dispensing a prescription	$ 3.371
Average dispensing fee (gross margin) yielding a 10% net markup on cost	$ 4.027

Summary

Calculating the cost-of-dispensing figure for a pharmacy is more than just a mathematical exercise. Pharmacy managers who know what it costs them to dispense a prescription have greater control over their pharmacy operations because they are in a better position to adjust quickly to changes in the marketplace. Cost of dispensing is another "tool" available to those pharmacists who have learned that you cannot plan for tomorrow unless you know where you are today.

Sales Volume Summary

A major objective of pharmacy management is to increase sales volume. Equally important is the notion that businesses which hope to achieve long-term success must also be concerned with maximizing profit and return on investment by controlling operating expenses and merchandise costs.

Table 2 illustrates how selected operating data vary with growing sales volume. Although a chain unit's financial statistics are affected by sales volume, it is important to recognize that the characteristics of the individual store may also have an impact on these figures. NACDS-LILLY DIGEST averages are adjusted to exclude refunds, sales tax collections, allowances to customers, and returns. The cost of goods sold is adjusted for discounts received, warehouse fees, and freight charges.

As total sales rise, gross margin and total expenses tend to decrease as a percent of sales (Table 2). However, the decline in total expenses occurred at a faster rate than did that of gross margin, which resulted in an uptrend in net profit before taxes. It is important to note that larger operations were more profitable than smaller ones and, among other factors, demonstrated the impact of "economies of scale."

The chain drugstore units with sales volume under $750,000 may represent unusual types of operations. The pharmacies in this category most likely include those in the early stages of development that have not yet reached their full sales potential—typical of newly opened stores. On the other hand, established units in this category may be experiencing losses because of changing markets or competition. In either case, the future prospects should be thoroughly appraised and evaluated.

Gross Margin

With increasing volume, gross margin declines overall, from 29.2% of sales in the lowest category (sales under $750,000) to 26.6% for stores reporting over $4,000,000 in annual income (Table 2). It has been shown in prior editions of the DIGEST that the gross margin percentage falls as the ratio of prescription sales to total sales declines. In fact, Table 2 data show that prescription income, as a percent of sales, drops from 36.6% in stores with sales less than $750,000 to 16.8% in pharmacies with annual volume in excess of $4,000,000.

Pharmacies with greater volume report higher inventory turnover rates. Higher turnover usually results in better cash flow, less dependence on debt, and a reduced storage space requirement. It would appear that in operations with greater sales volume, management tends to adopt aggressive price strategies as long as inventory turnover is sufficiently high and expenses are adequately controlled to generate the desired return on investment. It is likely that these units are located in markets characterized by intense price competition. This, too, may have an effect on the gross margin level.

Expenses

Total expenses fell from 36.1% in outlets with sales under $750,000 to 19.6% in stores reporting over $4,000,000 in sales (Table 2). A decrease in the total wage package as sales volume climbs is largely responsible for the decline in total expenses. As sales rise, greater employee productivity is clearly evident, as shown by the decrease in the total wage package—from 16.8% to 9.1% of sales. As a result, net profit is highest in the largest sales category at 7.0% of sales.

A downtrend was observed in rental expenses as sales volume rose—from 4.8% in stores with income under $750,000 to 2.3% in operations whose sales exceeded $4,000,000. However, rental expense per square foot tends to increase as annual sales grow—from $5.36 in the smallest volume units to $7.67 in the highest. Dollarwise, the average rental cost moved upward, from about $25,000 to about $131,000 as sales increased. A more detailed analysis of rental expense appears on pages 16 and 17 in the section entitled "Rent."

Miscellaneous operating expenses (all costs except manager's salary, employees' wages, rent, and headquarters fee) declined from 10.9% of sales in the lowest sales group to 6.0% in the highest. With rising sales volume, greater productivity was achieved in these expense items through economies of scale. This relationship illustrates the need for constant monitoring of the various items included in miscellaneous operating costs, since, collectively, they have a significant impact on net profit.

The headquarters fee charged to each individual unit increased dollarwise but remained relatively constant as a percent of sales (3.6%) until annual sales reached the $2,000,000 level. At this point, the fee tended to decline percentagewise as sales advanced. The largest-volume store paid a headquarters fee of 2.2% of sales.

TABLE 2 Chain operations according to sales volume

AVERAGES PER PHARMACY	Total Sales under $750,000 (75 Pharmacies)	Total Sales $750,000 to $1,000,000 (105 Pharmacies)	Total Sales $1,000,000 to $1,500,000 (256 Pharmacies)
SALES			
Prescription	$191,002— 36.6%	$297,527— 34.0%	$ 414,802— 33.5%
Other	330,745— 63.4%	578,060— 66.0%	825,185— 66.5%
Total	$521,747—100.0%	$875,587—100.0%	$1,239,987—100.0%
COST OF GOODS SOLD	369,539— 70.8%	618,946— 70.7%	870,270— 70.2%
GROSS MARGIN	$152,208— 29.2%	$256,641— 29.3%	$ 369,717— 29.8%
EXPENSES			
Manager's salary	$ 28,385— 5.4%	$ 31,130— 3.6%	$ 31,671— 2.6%
Employees' wages	59,363— 11.4%	90,335— 10.3%	119,178— 9.6%
Rent	24,934— 4.8%	29,062— 3.3%	34,543— 2.8%
Headquarters fee	18,761— 3.6%	30,890— 3.5%	44,523— 3.6%
Miscellaneous operating costs	57,076— 10.9%	81,118— 9.3%	103,319— 8.3%
Total	$188,519— 36.1%	$262,535— 30.0%	$ 333,234— 26.9%
NET PROFIT (before taxes)	($ 36,311— 6.9%)	($ 5,894— 0.7%)	$ 36,483— 2.9%
Value of inventory at cost and as a percent of sales	$131,660— 25.2%	$165,991— 19.0%	$ 207,157— 16.7%
Annual rate of turnover of inventory	2.8 times	3.8 times	4.3 times
SIZE OF AREA*	4,656 sq. ft.	5,794 sq. ft.	6,814 sq. ft.
Sales per square foot	$112.06	$151.14	$181.76
Rent per square foot	5.36	5.02	5.07
PRESCRIPTIONS DISPENSED	16,584	25,127	34,735
PRESCRIPTION CHARGE	$ 11.52	$ 11.84	$ 11.94
NUMBER OF HOURS PER WEEK			
Pharmacy was open	73 hours	79 hours	80 hours
Worked by manager	48 hours	46 hours	46 hours
Worked by employed pharmacist(s)	36 hours	49 hours	65 hours

*Based on averages of pharmacies that reported all data

Inventory

A major asset that lends itself to managerial control is inventory, and effective utilization of inventory is required to obtain maximum return on investment. Table 2 shows that as total sales advance, inventory dollars increase—from over $131,000 in the lowest sales group to almost $566,000 in the highest—whereas inventory investment drops, percentagewise, from 25.2% to 9.7%. Not unexpectedly, inventory turnover climbed from 2.8 times per year to 7.6 times as sales rose. It should be noted that this report does not take into consideration changes in accounting procedures for inventory valuation; nonetheless, these trends should be representative of current practices.

Total Sales $1,500,000 to $2,000,000 (230 Pharmacies)	Total Sales $2,000,000 to $2,500,000 (191 Pharmacies)	Total Sales $2,500,000 to $3,000,000 (145 Pharmacies)	Total Sales $3,000,000 to $3,500,000 (156 Pharmacies)	Total Sales over $4,000,000 (124 Pharmacies)
$ 512,060— 29.4%	$ 545,060— 24.3%	$ 622,079— 22.9%	$ 697,537— 20.5%	$ 979,070— 16.8%
1,229,808— 70.6%	1,699,960— 75.7%	2,099,835— 77.1%	2,712,701— 79.5%	4,851,487— 83.2%
$1,741,868—100.0%	$2,245,020—100.0%	$2,721,914—100.0%	$3,410,238—100.0%	$5,830,557—100.0%
1,227,188— 70.5%	1,605,500— 71.5%	1,969,046— 72.3%	2,488,688— 73.0%	4,280,124— 73.4%
$ 514,680— 29.5%	$ 639,520— 28.5%	$ 752,868— 27.7%	$ 921,550— 27.0%	$1,550,433— 26.6%
$ 30,468— 1.7%	$ 31,445— 1.4%	$ 33,198— 1.2%	$ 34,768— 1.0%	$ 54,419— 0.9%
166,002— 9.5%	208,530— 9.3%	242,941— 8.9%	276,827— 8.1%	476,902— 8.2%
49,538— 2.8%	62,587— 2.8%	70,987— 2.6%	79,646— 2.3%	131,317— 2.3%
61,953— 3.6%	68,329— 3.0%	74,327— 2.8%	115,251— 3.4%	126,954— 2.2%
142,404— 8.2%	182,878— 8.2%	209,610— 7.7%	215,244— 6.3%	354,325— 6.0%
$ 450,365— 25.8%	$ 553,769— 24.7%	$ 631,063— 23.2%	$ 721,736— 21.1%	$1,143,917— 19.6%
$ 64,315— 3.7%	$ 85,751— 3.8%	$ 121,805— 4.5%	$ 199,814— 5.9%	$ 406,516— 7.0%
$ 267,419— 15.4%	$ 330,322— 14.7%	$ 366,282— 13.5%	$ 396,079— 11.6%	$ 565,784— 9.7%
4.6 times	5.0 times	5.5 times	6.3 times	7.6 times
8,218 sq. ft.	9,933 sq. ft	10,779 sq. ft.	11,399 sq. ft.	17,127 sq. ft.
$211.32	$226.59	$251.80	$299.17	$340.43
6.03	6.30	6.59	6.99	7.67
42,713	46,203	52,686	59,697	80,241
$11.99	$11.80	$11.81	$11.68	$12.20
82 hours	85 hours	85 hours	86 hours	88 hours
46 hours	46 hours	47 hours	46 hours	46 hours
74 hours	83 hours	86 hours	94 hours	112 hours

Prescription Activity

For the second consecutive year, an increase in total prescriptions dispensed was posted by chain outlets participating in the NACDS-LILLY DIGEST (Chart 1). This greater level of prescription activity was accompanied by a higher average prescription charge, with the result that prescription income increased almost $68,000 or 14.3% from the previous year but was unchanged as a percent of total sales (Table 1). Since product mix, prescription size, dispensing costs, and product costs are all elements of the average prescription charge, it is inaccurate to cite the "average prescription charge" as a measure of prescription drug prices.

The impact of daily prescription activity on operating statistics is shown in Table 3. As both sales and prescription activity increase, the number of store hours open and the hours worked by employed pharmacists also trend upward. However, employed pharmacist hours do not expand proportionately with greater prescription demand and total sales volume. For example, the larger-volume stores generate about five times as many prescriptions with about twice the pharmacist hours as the pharmacies in the lowest sales group. This increased productivity in higher-volume units may have been achieved through the use of technicians and/or computer application in the prescription department in addition to the efficiencies of scale expected when volume is adequate to utilize resources fully.

As prescription activity increases, total expenses decline faster, as a percent of sales, than does gross margin, which results in an uptrend in net profit for those stores with greater prescription activity—7.8% in comparison with a loss in the smallest sales class. As Table 3 indicates, when prescription sales grow, the average prescription charge tends to exhibit an overall downward trend.

Prescription inventory may be expected to be larger in stores dispensing more than 200 prescriptions daily ($70,669) than in those dispensing fewer than 75 prescriptions per day ($28,318). When prescription inventory investment is expressed as a percent of sales, the highest sales group reported a stock investment of 6.4% in comparison with 12.2% in the lowest category.

A more meaningful measure of prescription inventory control is noted when prescription sales per dollar of prescription inventory are calculated and examined. As the number of prescriptions dispensed daily grows, prescription sales per dollar invested in inventory advance from $8.17 to $15.61.

Chain pharmacy managers have suggested that the relationship of the number of prescriptions dispensed to employed pharmacist hours provides another measurement of pharmacist productivity. To calculate this ratio, the data in Table 3 were used. An estimate of the time the manager spends in the professional area was added to employed pharmacist hours to determine prescriptions dispensed per pharmacist hour. It rose sharply—from 4.5 in stores with the lowest prescription revenue to 13.5 in the highest. When compared with similar figures for 1983, the ratio improved in all categories of prescription activity.

CHART 1
Total number of prescriptions dispensed

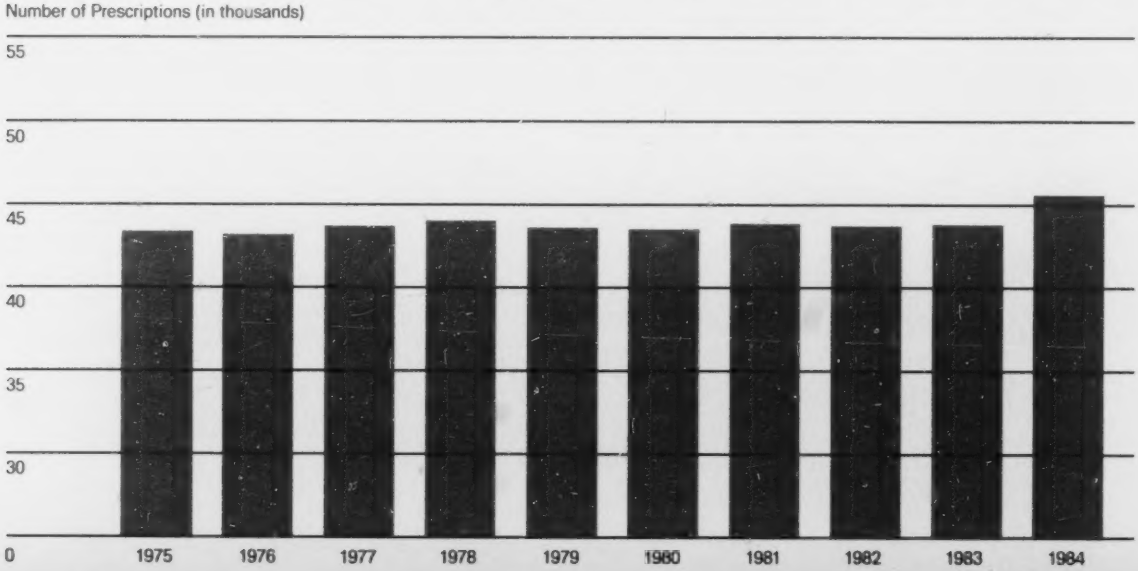

TABLE 3 Chain operations according to number of prescriptions dispensed daily

AVERAGES PER PHARMACY	Under 75 Prescriptions Daily (277 Pharmacies)	75 to 100 Prescriptions Daily (236 Pharmacies)	100 to 150 Prescriptions Daily (391 Pharmacies)	150 to 200 Prescriptions Daily (216 Pharmacies)	Over 200 Prescriptions Daily (162 Pharmacies)
SALES					
Prescription	$ 231,389— 18.5%	$ 373,770— 22.3%	$ 524,846— 23.8%	$ 730,625— 24.7%	$1,103,228— 26.1%
Other	1,022,444— 81.5%	1,305,029— 77.7%	1,679,071— 76.2%	2,222,994— 75.3%	3,121,310— 73.9%
Total	$1,253,833—100.0%	$1,678,799—100.0%	$2,203,917—100.0%	$2,953,619—100.0%	$4,224,538—100.0%
COST OF GOODS SOLD	907,100— 72.4%	1,216,124— 72.4%	1,591,838— 72.2%	2,116,340— 71.7%	3,031,296— 71.8%
GROSS MARGIN	$ 346,733— 27.6%	$ 462,675— 27.6%	$ 612,079— 27.8%	$ 837,279— 28.3%	$1,193,242— 28.2%
EXPENSES					
Manager's salary	$ 30,310— 2.4%	$ 31,653— 1.9%	$ 32,606— 1.5%	$ 35,678— 1.2%	$ 44,341— 1.0%
Employees' wages	127,930— 10.2%	158,191— 9.4%	199,033— 9.0%	247,721— 8.4%	345,092— 8.2%
Rent	45,667— 3.6%	51,929— 3.1%	54,601— 2.5%	70,087— 2.4%	90,873— 2.2%
Headquarters fee	34,294— 2.7%	46,025— 2.8%	57,215— 2.6%	91,269— 3.1%	127,121— 3.0%
Miscellaneous operating costs	118,424— 9.5%	139,189— 8.3%	169,229— 7.7%	214,352— 7.2%	256,319— 6.0%
Total	$ 356,625— 28.4%	$ 426,987— 25.5%	$ 512,684— 23.3%	$ 659,107— 22.3%	$ 863,746— 20.4%
NET PROFIT (before taxes)	($ 9,892— 0.8%)	$ 35,688— 2.1%	$ 99,395— 4.5%	$ 178,172— 6.0%	$ 329,496— 7.8%
Value of inventory at cost and as a percent of sales					
Prescription inventory	$ 28,318— 12.2%	$ 35,457— 9.5%	$ 42,662— 8.1%	$ 52,805— 7.2%	$ 70,669— 6.4%
Total inventory	$ 229,493— 18.3%	$ 264,031— 15.7%	$ 304,235— 13.8%	$ 361,629— 12.2%	$ 436,256— 10.3%
Annual rate of turnover of inventory	3.9 times	4.7 times	5.4 times	6.0 times	7.0 times
SIZE OF AREA	7,745 sq. ft.	8,172 sq. ft	8,766 sq. ft	11,629 sq. ft.	11,559 sq. ft.
Sales per square foot*	$161.89	$236.50	$318.15	$356.23	$538.26
PRESCRIPTIONS DISPENSED	18,960	31,574	44,214	61,818	92,477
PRESCRIPTION CHARGE	$12.20	$11.84	$11.87	$11.82	$11.93
NUMBER OF HOURS PER WEEK					
Pharmacy was open	78 hours	81 hours	84 hours	85 hours	86 hours
Worked by manager	47 hours	47 hours	46 hours	46 hours	45 hours
Worked by employed pharmacist(s)	59 hours	72 hours	79 hours	86 hours	98 hours

*Based on averages of pharmacists that reported all data

Rent

Chart 2 shows the distribution of rent percentages for pharmacies reporting to the NACDS-Lilly Digest. Over 75% of the chain outlets had a rent expense of less than 3.5% of sales, and almost 90% posted an outlay for rent under 4.5% of total sales.

A realistic and reasonable comparison of rental data can be obtained by considering rent expense from several perspectives. Table 4 is arranged so that chain management can evaluate rent according to the particular characteristics of each unit.

Section A illustrates the relationship between annual sales and floor space. As sales move upward, the size of the outlet in square feet also increases. As expected, sales productivity rises when sales volume grows, as demonstrated by the sales-per-square-foot ratios. Dollarwise, rent per square foot generally becomes more expensive as stores increase in floor area although, as a percentage of sales, rent tends to decline.

Section B expresses rental expense according to store location. Interestingly, chain drugstores in neighborhood locations recorded the highest average sales volume and floor space but paid the fewest dollars per square foot for rent. They also had the lowest rental figure as a percent of sales. On the other hand, medical office building pharmacies posted the smallest annual sales volume and floor area, but they reported the highest rental expense per square foot and the greatest rental percentage.

Section C shows the effect of prescription activity on rent. As daily prescription activity increases, there tends to be a corresponding increase in average sales, store size, sales per square foot, and dollars spent for rent. However, rental expenditures as a percent of sales decline.

Section D summarizes regional variations that are observed in average sales, size of pharmacy, and rent. Rent fluctuates as a percent of sales according to geographic location, with the lowest in the Pacific States and the highest in the East South Central States. However, when rental expense per square foot is reviewed, the South Atlantic Region recorded the largest figures and the West North Central States the smallest.

Section E presents selected statistics according to floor size. It is understandable that as chain units increase in size, average sales also advance. However, rent and sales per square foot tend to decline as stores acquire more space. Contrasted with the statistics in Section A, data in Section E seem to be in conflict, but it appears that store age may account for this situation. New stores occupy a set area, and sales must grow to expectations. As a result, Section E shows sales below those of Section A at comparable floor areas. Hence, the sales and rent ratios represent established stores in Section A and less-than-established units in Section E.

Section F describes rental expense as it relates to store age. The lowest sales volume is observed in outlets less than two years old. These newer pharmacies also appear to post higher rental charges as a percent of sales than do more mature operations, which is expected since they have not yet reached their full sales potential. When compared with 1983 figures, chain operations of all ages showed an increase in overall size. In contrast to data in the last edition of the NACDS-Lilly Digest, this increase suggests a trend toward larger-sized stores. However, since the tabulation may include chain units that have not reported in previous years, it would be unwise to form definite conclusions at this time.

CHART 2
Percent of pharmacies reporting various rent percentage changes

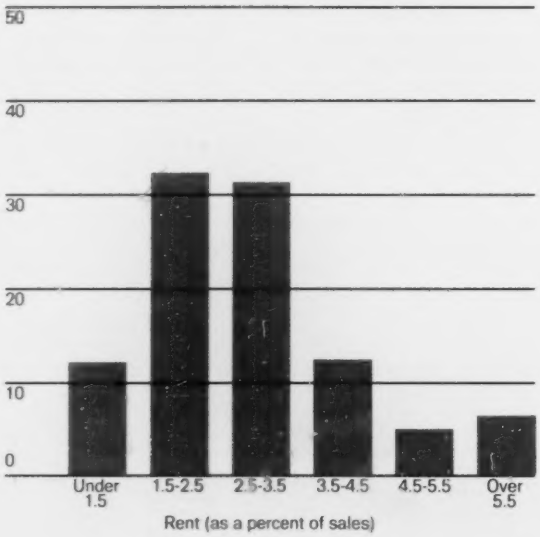

TABLE 4 Rent correlated with various factors

		Average Sales	Size of Pharmacy* (Square Feet)	Sales per Square Foot*	Average Rent	Rent per Square Foot	Rent Percentage
A	**Annual Sales**						
	Under $750,000	$ 521,747	4,656	$112.06	$ 24,934	$ 5.36	4.8%
	$750,000 to $1,000,000	875,587	5,794	151.14	29,062	5.02	3.3%
	$1,000,000 to $1,500,000	1,239,987	6,814	181.76	34,543	5.07	2.8%
	$1,500,000 to $2,000,000	1,741,868	8,218	211.32	49,538	6.03	2.8%
	$2,000,000 to $2,500,000	2,245,020	9,933	226.59	62,587	6.30	2.8%
	$2,500,000 to $3,000,000	2,721,914	10,779	251.80	70,987	6.59	2.6%
	$3,000,000 to $4,000,000	3,410,238	11,399	299.17	79,646	6.99	2.3%
	Over $4,000,000	5,830,557	17,127	340.43	131,317	7.67	2.3%
B	**Location**						
	Downtown	$1,538,353	6,178	$252.49	$ 39,666	$ 6.42	2.6%
	Neighborhood	2,867,841	11,180	252.11	65,902	5.89	2.3%
	Neighborhood Shopping Center	2,244,030	9,319	237.77	58,873	6.32	2.6%
	Regional Shopping Center	2,552,401	9,757	265.58	72,482	7.43	2.8%
	Medical Office Building	842,421	1,919	417.60	38,768	20.20	4.6%
C	**Prescriptions Dispensed Daily**						
	Under 75	$1,253,833	7,745	$161.89	$ 45,667	$ 5.90	3.6%
	75 to 100	1,678,799	8,172	236.50	51,929	6.35	3.1%
	100 to 150	2,203,917	8,766	318.15	54,601	6.23	2.5%
	150 to 200	2,953,619	11,629	356.23	70,087	6.03	2.4%
	Over 200	4,224,538	11,559	538.26	90,873	7.86	2.2%
D	**Geographic Region**						
	New England States	$1,765,386	6,187	$272.91	$ 41,259	$ 6.67	2.3%
	Middle Atlantic States	2,383,237	10,214	233.21	62,411	6.11	2.6%
	South Atlantic States	2,730,027	8,147	335.10	59,396	7.29	2.2%
	East North Central States	2,423,197	9,461	256.85	63,167	6.68	2.6%
	West North Central States	2,136,230	10,856	199.29	60,841	5.60	2.8%
	East South Central States	1,437,143	7,830	160.44	46,307	5.91	3.2%
	West South Central States	2,475,887	11,515	215.01	66,204	5.75	2.7%
	Mountain States	2,555,222	11,243	227.28	75,300	6.70	2.9%
	Pacific States	4,358,871	13,073	349.23	85,409	6.53	2.0%
	NACDS-Lilly Digest Average	2,283,617	9,132	245.79	59,371	6.50	2.6%
E	**Floor Size**						
	Under 1,500 square feet	$ 551,124	1,003	$549.48	$ 29,297	$29.20	5.3%
	1,500 to 4,999 square feet	1,176,323	3,707	317.36	31,215	8.42	2.7%
	5,000 to 9,999 square feet	1,836,835	7,493	245.14	48,466	6.47	2.6%
	10,000 to 12,499 square feet	2,739,625	11,124	246.28	62,715	5.64	2.3%
	12,500 to 14,999 square feet	3,322,784	13,714	242.29	87,302	6.37	2.6%
	15,000 to 17,499 square feet	3,749,731	15,954	235.04	90,579	5.68	2.4%
	17,500 to 20,000 square feet	5,184,485	18,442	281.12	115,941	6.29	2.2%
	Over 20,000 square feet	5,284,798	29,661	161.61	127,044	4.28	2.4%
F	**Store Age**						
	Less than 2 years	$1,397,501	9,254	$151.01	$ 46,935	$ 5.07	3.4%
	2 to 5 years	2,156,328	9,437	228.50	59,507	6.31	2.8%
	5 to 10 years	2,054,614	9,332	220.18	53,008	5.68	2.6%
	Over 10 years	2,494,404	9,099	274.14	60,595	6.66	2.4%

*Based on averages of pharmacies that reported all data

Net Profit

A high level of pharmaceutical service can be maintained by chain pharmacy managers only if adequate profit is generated by the store. Profits are needed to support working capital requirements, return to investors, and retained earnings. If faced with continual losses, the chain unit will require the infusion of capital to sustain the operation. When such capital is borrowed, it usually results in higher interest expense charged to the unit and the potential for even greater losses. Without the required capital, these pharmacies will eventually fail, and their services to the community will be lost.

Table 5 indicates that 19% of all chain drugstores reporting to the NACDS-LILLY DIGEST operated at a loss during 1984. In addition, 11% realized a net profit of less than 2% of total sales. At the other end of the profit range, 21% of respondents earned a net profit between 7% and 10% of sales, and just 9% of all chain outlets reported a net profit in excess of 10% of sales. Put another way, three out of every ten chain stores produced less than a 2% net profit, whereas only one out of ten generated a net profit greater than 10%.

Turnover

The data in Table 6 represent operating statistics selected from a group of chain drugstores with a high inventory turnover rate and another group with a low rate. These figures indicate that unit managers who control their inventory and maintain a high turnover rate can improve the unit's profitability. Stores with an inventory turnover rate averaging 7.1 times per year reported a lower gross margin than the slow turnover group. However, because of the offsetting effect of lower total expenses, these stores posted a higher net profit. The more favorable expense figure may result, in part, from the lower costs and better control associated with carrying a smaller inventory.

TABLE 6 Turnover comparison

(percent of sales)

	Fast Turnover (297 Pharmacies)	Slow Turnover (281 Pharmacies)
Total Sales ($000)	$3,098	$1,462
Cost of goods sold	73.3%	70.7%
Gross margin	26.7%	29.3%
Employee's wages	8.0%	9.8%
Rent and miscellaneous expenses	11.3%	15.8%
Total expenses	20.5%	27.7%
Net profit	6.2%	1.6%
Total inventory	10.3%	18.7%
Inventory turnover rate	7.1 times	3.8 times

TABLE 5 Net profit according to sales size

Net Profit Percentage	Under $750,000	$750,000 to $1,000,000	$1,000,000 to $1,500,000	$1,500,000 to $2,000,000	$2,000,000 to $3,000,000	Over $3,000,000	Total
Number of Stores Reporting	75	105	256	230	336	280	1,282
Operating at a loss	73%	47%	19%	19%	12%	4%	19%
Less than 2%	12%	17%	16%	6%	14%	6%	11%
2% to 5%	7%	18%	28%	24%	27%	17%	23%
5% to 7%	6%	11%	15%	16%	17%	23%	17%
7% to 10%	1%	5%	16%	24%	19%	36%	21%
10% and over	1%	2%	6%	11%	11%	14%	9%

Location

The financial data of chain store units are arranged according to location in Table 7. Within the first four categories, chain drugstores in downtown business districts reported the largest gross margin but were unable to generate the greatest net profit because of high total expenses. These were incurred by larger expenditures for the total wage package and miscellaneous operating costs as a percent of sales. Pharmacies in downtown locations also reported the lowest prescription activity and the smallest floor area.

Pharmacies in neighborhood locations had the highest annual sales volume and net profit dollarwise but the lowest prescription department revenue as a percent of sales. The inventory turnover rate in such stores was the highest. These locations also posted the largest-sized outlets and were open for business the greatest number of hours per week.

Neighborhood shopping center businesses were the largest group reporting to the NACDS-LILLY DIGEST. These pharmacies recorded the lowest sales per square foot and dispensed the most prescriptions but charged the least for them.

Statistics for medical office building locations are typified by a high gross margin and prescription income as a percent of sales. They also have a relatively small floor area. However, their high total expenses offset the favorable gross margin and produced a lower net profit. Medical office building pharmacies usually pay more rent per square foot of space because of their location and size. These units consistently report the lowest number of hours open and employed pharmacist hours worked, which probably reflects the office hours of physicians located in the buildings.

TABLE 7 Chain operations according to location

AVERAGES PER PHARMACY	Downtown Business District (136 Pharmacies)	Neighborhood (187 Pharmacies)	Neighborhood Shopping Center (776 Pharmacies)	Regional Shopping Center (133 Pharmacies)	Medical Office Building (13 Pharmacies)
SALES					
Prescription	$ 419,475— 27.3%	$ 538,180— 18.8%	$ 562,341— 25.1%	$ 522,803— 20.5%	$466,239— 55.3%
Other	1,118,878— 72.7%	2,329,661— 81.2%	1,681,689— 74.9%	2,029,598— 79.5%	376,182— 44.7%
Total	$1,538,353—100.0%	$2,867,841—100.0%	$2,244,030—100.0%	$2,552,401—100.0%	$842,421—100.0%
COST OF GOODS SOLD	1,079,963— 70.2%	2,086,677— 72.8%	1,620,908— 72.2%	1,821,969— 71.4%	591,858— 70.3%
GROSS MARGIN	$ 458,390— 29.8%	$ 781,164— 27.2%	$ 623,122— 27.8%	$ 730,432— 28.6%	$250,563— 29.7%
EXPENSES					
Manager's salary	$ 30,839— 2.0%	$ 35,771— 1.2%	$ 32,974— 1.5%	$ 35,839— 1.4%	$ 27,710— 3.3%
Employees' wages	143,520— 9.3%	249,827— 8.7%	199,733— 8.9%	223,684— 8.8%	59,750— 7.1%
Rent	39,666— 2.6%	65,902— 2.3%	58,873— 2.6%	72,482— 2.8%	38,768— 4.6%
Headquarters fee	51,460— 3.3%	69,861— 2.4%	67,092— 3.0%	57,230— 2.3%	37,170— 4.4%
Miscellaneous operating costs	124,236— 8.1%	205,363— 7.2%	169,384— 7.6%	189,948— 7.4%	55,646— 6.6%
Total	$ 389,721— 25.3%	$ 626,724— 21.8%	$ 528,056— 23.6%	$ 579,183— 22.7%	$219,044— 26.0%
NET PROFIT (before taxes)	$ 68,669— 4.5%	$ 154,440— 5.4%	$ 95,066— 4.2%	$ 151,249— 5.9%	$ 31,519— 3.7%
Warehouse fee*	$ 26,119— 1.6%	$ 32,761— 1.6%	$ 40,814— 1.9%	$ 21,550— 0.9%	n/a
As a percent of cost of goods sold	2.3%	2.3%	2.6%	1.2%	
Value of inventory at cost and as a percent of sales	$ 226,360— 14.7%	$ 357,742— 12.5%	$ 304,515— 13.6%	$ 340,481— 13.3%	$ 80,418— 9.5%
Inventory turnover rate	4.9 times	5.9 times	5.4 times	5.5 times	7.3 times
Size of area and sales per square foot*	6,178 sq. ft. $252.49	11,180 sq. ft. $252.11	9,319 sq. ft. $237.77	9,757 sq. ft. $265.58	1,919 sq. ft. $417.60
PRESCRIPTIONS DISPENSED	35,051	44,460	47,857	42,388	36,740
PRESCRIPTION CHARGE	$11.97	$12.10	$11.75	$12.33	$12.69
HOURS PER WEEK*					
Pharmacy was open	78 hours	87 hours	84 hours	80 hours	78 hours
Worked by manager	46 hours	48 hours	46 hours	47 hours	45 hours
Worked by employed pharmacist(s)	67 hours	89 hours	77 hours	86 hours	38 hours

*Based on averages of pharmacies that reported all data

Geographic Perspective

When an individual store's operating figures are compared with the averages published in the NACDS-LILLY DIGEST, influences such as the cost of living, population density, ratio of pharmacies to population, buying power, pharmacy manpower, and third-party health programs should also be considered. Table 8 summarizes the differences in selected operating statistics according to geographic breakdowns that are consistent with those of the U.S. Department of Commerce and permit comparisons with published regional economic data.

Pharmacies in the Pacific States again posted the highest annual sales volume and also recorded the largest floor area. In addition, these operations reported the lowest gross margin, total expenses, and inventory investment as a percent of sales.

The East South Central States showed the lowest total sales figure and net profit percentage. Stores in this region charged the fewest dollars for their prescriptions. These operations also reported the highest value of inventory at 17.7% of sales. Chain outlets in the South Atlantic States had the highest net profit percentage and recorded the greatest prescription activity.

Chain drugstores located in the Mountain Region posted the highest average prescription charge and were open the most hours per week but dispensed the fewest prescriptions. Pharmacies in the West South Central States had the shortest business hours.

During 1984, the Middle Atlantic States reported the highest percent of prescription sales to total sales, whereas units in the Pacific States had the lowest. Operations in the West North Central Region showed the greatest gross margin figure at close to 30% of sales. Sales per square foot of floor area were highest in the Pacific States and lowest in the East South Central Region.

In comparison with 1983 data, the South Atlantic States showed the greatest improvement in net profit (up 1.3%), essentially the result of lower total expenses as a percent of sales. The West South Central Region, however, had the largest decline in net profit (down 1.6% to 3.1% of sales). This decrease was caused by a decline in gross margin accompanied by an increase in total expenses as a percent of total sales.

When individual store evaluations are to be made, the "Self-Analysis" section is recommended as the primary comparative tool—to be followed by a review of specialized tabulations such as those in the "Geographic Perspective" section.

TABLE 8 Geographic summary of selected operating statistics

GEOGRAPHIC REGION	Total Sales (in million dollars)	Percent of Prescription Sales to Total Sales	Gross Margin	Total Wage Package	Rent	Headquarters Fee	Total Expenses	Net Profit (percent of sales)	Value of inventory at cost	Size of area (sq. ft.)	Number of Prescriptions (in thousands)	Average Prescription Charge	Hours Open Weekly
New England States (CT, ME, MA, NH, RI, VT)	$1.8	28.3%	28.4%	10.6%	2.3%	4.8%	26.2%	2.2%	15.1%	6,187	43.0	$11.61	85
Middle Atlantic States (NJ, NY, PA)	2.4	28.6	29.3	8.7	2.6	4.0	22.6	6.8	13.8	10,214	55.2	12.33	84
East North Central States (IL, IN, MI, OH, WI)	2.4	22.9	27.8	9.8	2.6	3.0	22.1	5.7	11.2	9,461	46.8	11.82	86
West North Central States (IA, KS, MN, MO, NE, ND, SD)	2.1	22.2	29.9	11.4	2.8	2.9	26.2	3.6	15.8	10,856	38.3	12.39	79
South Atlantic States (DE, DC, FL, GA, MD, NC, SC, VA, WV)	2.7	23.4	28.2	9.5	2.2	1.8	20.8	7.4	12.7	8,147	57.0	11.71	82
East South Central States (AL, KY, MS, TN)	1.4	26.7	27.5	12.1	3.2	1.4	25.7	1.8	17.7	7,830	35.0	10.96	81
West South Central States (AR, LA, OK, TX)	2.5	20.9	26.0	12.2	2.7	0.7	22.9	3.1	13.8	11,515	46.3	11.18	76
Mountain States (AZ, CO, ID, MT, NV, NM, UT, WY)	2.6	17.9	28.2	10.2	2.9	2.5	23.5	4.6	14.6	11,243	34.9	13.11	89
Pacific States (AK, CA, HI, OR, WA)	4.4	14.7	25.7	10.8	2.0	1.5	20.2	5.5	9.9	13,073	49.8	12.84	81
NACDS-LILLY DIGEST Average	2.3	23.7	28.0	10.4	2.6	2.8	23.3	4.7	13.4	9,132	45.5	11.90	83

Operating Trends

Trends and changes in selected operating statistics of the chain drugstore industry are reflected in Table 9 and span the period from 1975 through 1984. Future projections may be based on knowledge of local market conditions, anticipated opportunities, and an understanding of the patterns observed in past years.

Sales, Expenses, Inventory Levels

Annual sales volume in the typical NACDS-LILLY DIGEST store showed a positive increase over the decade. The growth recorded during the second half of the period was particularly impressive, and it is anticipated that this growth will continue. Total sales for 1984 established a new record; however, net profit took a significant downturn percentagewise and fell below the 5% level. Although this figure has fluctuated in past years, the overall trend has been downward.

As a percent of sales, gross margin had its largest decrease in one year since 1975. This lower level of gross margin was the major contributor to the decline in net profit.

Percentagewise, the total wage package expense tended to remain relatively constant during the early part of the decade, at just over 11% of sales. However, since 1982, this expense has declined to the 10.5% range and has appeared to stabilize.

As a percent of sales, inventory at cost had not shown a definite pattern prior to 1984, when a significant reduction in this figure occurred—decreasing to 13.4% of sales.

Prescription Trends

The professional area's share of total sales has shown a relatively constant increase over the decade and remains at its highest level of the period. The number of prescriptions dispensed during 1984 established a new record and continued the uptrend that began in 1983.

The productivity of prescription stock (sales per dollar of prescription inventory) also set a new record ($12.45), surpassing the $12 level for the first time. The average prescription charge increased 10.5% during 1984 but remained below the $12 level at $11.90. It is interesting to note that the average prescription charge has increased almost one and one-half times during the past decade.

TABLE 9 Averages of pharmacy operations—1975-1984

(based on all pharmacies reporting)

EXPRESSED IN DOLLARS AND PERCENTAGES OF SALES

Year	($000) Sales	Gross Margin	Total Wage Package	Rent	Total Expenses	Net Profit	Inventory at Cost	Percentage of Prescription Sales to Total Sales	Number of Prescriptions	Prescription Charge	Prescription Sales per Dollar of Prescription Inventory
1975	$1,173	28.2%	11.9%	2.8%	24.1%	4.1%	14.0%	17.7%	43,457	$ 4.77	$ 9.54
1976	1,239	27.8	11.2	2.7	23.6	4.2	14.9	18.2	43,305	5.19	10.04
1977	1,295	28.2	11.4	2.7	24.0	4.2	15.1	18.9	43,742	5.59	10.13
1978	1,443	28.2	11.2	2.6	23.8	4.4	14.5	18.3	44,144	5.99	10.37
1979	1,607	28.0	11.1	2.7	23.8	4.2	14.1	17.9	43,877	6.56	10.47
1980	1,686	28.9	11.2	2.7	24.5	4.4	14.4	18.7	43,578	7.24	10.61
1981	1,824	28.5	11.1	2.5	24.9	3.6	15.1	20.0	44,001	8.31	11.37
1982	1,962	28.8	10.5	2.6	23.4	5.4	14.2	21.5	43,780	9.62	11.44
1983	1,995	28.6	10.5	2.5	23.5	5.1	14.3	23.7	43,967	10.77	11.84
1984	2,284	28.0	10.4	2.6	23.3	4.7	13.4	23.9	45,495	11.90	12.45

Operations Outlook

Forecasting Chain Pharmacy Operations for 1989

Jean Paul Gagnon, Ph.D.*

Forecasting tasks are an important part of the daily work of a chain pharmacy executive. Every day there is a need to forecast either sales, expenses, capital outlays, or some other financial statistic. Sometimes these forecasts involve the use of recent financial statements and sophisticated scientific prediction techniques, such as regression models. At other times, forecasts materialize from the hunches or intuition of the executive staff because of time limits or the absence of data. Regardless of the method used, few executives would argue against making financial forecasts because of their value in planning.

Most people agree that the computer has had a significant impact on forecasting. Because of its speed, memory, and extensive programming capacity, the computer has helped move forecasting from an art to a science. Nevertheless, a manager must study and adjust the computer's output, because computers are supplied with past data to make predictions; therefore, the effects of recent new knowledge or important new variables are often not reflected in the forecast.

This section of the NACDS-LILLY DIGEST presents a forecast of the financial status of the average chain drugstore in 1989. Two forecasting techniques were used; one employed the use of a computer model, the other was formed partly from the computer output and partly from other trend data.

Computer Forecast

In the computer forecast, average figures from the NACDS-LILLY DIGEST for the years 1971 to 1983 were used. The forecast is susceptible to great variability because only 13 years of data were available.

A review of the results of the computer analysis presented in the first column in Figure 1 reveals that store sales in 1989 are projected to increase over 27% from the 1983 figure. The average gross margin is forecast to increase to 29.6% of sales, and the inventory turnover ratio should remain essentially the same as that reported for 1983, with employees' wages remaining unchanged percentagewise. Prescription volume is predicted to rise at an average annual rate of 1.8%, and prescription prices are projected to increase at an average annual rate of 3%. In addition, floor space and inventory value at cost should increase by 22% and 27% respectively in 1989. Net profit is forecast to fall slightly to 5.0% of total sales, with prescription sales as a percent of total sales remaining approximately the same as the 1983 figure. It appears from the computer forecast that chain drugstores will experience growth over the next five years.

Noncomputer Forecast

A second forecast constructed from observations of current retailing trends appears in the second column of Figure 1.

The logical starting point for the judgmental forecast was to examine prescription sales trends, since they have a significant impact on total sales. Over the last five years, prescription prices have increased at an average rate of 10%. During the first half of 1985, there were signs that this rate of increase was declining. Prescription prices will probably not decline much more because there are two opposing forces working. As more drugs go off patent during the next few years, increased generic competition will lower drug prices. However, these decreases will be offset by brand-name companies charging higher prices for newly released patented drugs. Because of these forces, prescription prices will probably increase at an average annual rate of 8% over the next five years.

Prescription volume may increase at an annual rate of 2% over the next five years owing to the growth in the elderly population and the release of some new patented drug products. This 2% increase may also be evident if chain drugstores begin to contract to dispense prescriptions for Health Maintenance Organizations (HMO's). Prescription drug sales will advance at a higher rate than what the computer model predicted if prescription prices and volume increase at 8% and 2% respectively, as predicted.

Nonprescription sales in the noncomputer forecast model will probably continue upward at the same rate as predicted in the computer model. Chain drugstores have been capturing an increasingly larger share of this market, and this trend should continue barring the appearance of a new form of competition.

Gross margin in the chain drugstores is probably about as low as is financially feasible. Thus, the noncomputer forecast estimates that the average gross margin in chain units should remain at the 28% level for the next five years.

Many chain drugstore operations may be approaching the market maturity state in their life cycles. At this stage, chain stores may furnish services in addition to products; for example, some chains are implementing procedures to reduce customer waiting time in checkout lanes, and some are offering patient medication record cards because of intense competition. The use of more personnel and increased management skill becomes necessary if a store provides specialized services. Thus, there is a high probability that employees' wages and manager's salary levels will

*Jean Paul Gagnon, Ph.D., is Professor of Pharmacy Administration at the University of North Carolina at Chapel Hill.

increase. Moreover, a continuing shortage of pharmacists could result in higher pharmacists' salaries. It is possible that employees' wages and manager's salary may increase to 10% and 1.7% of sales, respectively, by 1989 because of these developments.

Prescription inventory levels, as a percent of sales, will probably remain the same because a decrease in inventory resulting from dispensing of generic drugs should be offset by the increased cost of new drugs. Inventory turnover should remain at 5 times per year, unless chain managers adopt sophisticated computer inventory control programs. Store size will probably decrease as more chain units appear in rural and less populated regions. Store hours will, in all likelihood, increase slightly as chain units seek to satisfy their clientele.

In summary, chain drugstores are forecast to continue to grow in both prescription and nonprescription sales. Moreover, their net profit should remain healthy over the next five years if they continue to practice efficient control over their operating expenses.

FIGURE 1

AVERAGES PER PHARMACY	1989 Computer Forecast*	1989 Noncomputer Forecast
SALES		
Prescription	$ 593,873— 23.4%	$ 767,950— 28.3%
Other	1,949,387— 76.6%	1,949,387— 71.7%
Total	$2,543,260—100.0%	$2,717,337—100.0%
COST OF GOODS SOLD	1,813,344— 71.3%	1,937,463— 71.3%
GROSS MARGIN	$ 729,916— 28.7%	$ 779,874— 28.7%
EXPENSES		
Manager's salary	$ 35,770— 1.4%	$ 46,195— 1.7%
Employees' wages	227,459— 8.9%	271,733— 10.0%
Other expenses	338,999— 13.3%	331,516— 12.2%
Total	$ 602,228— 23.6%	$ 649,444— 23.9%
NET PROFIT (before taxes)	$ 127,688— 5.0%	$ 130,430— 4.8%
Value of inventory at cost and as a percent of sales		
Prescription	$ 46,170— 7.8%	$ 62,972— 8.2%
Other	316,177— 16.2%	324,520— 16.6%
Total	$ 362,347— 14.2%	$ 387,492— 14.3%
Annual rate of turnover of inventory	5.0 times	5.0 times
SIZE OF AREA	sq. ft.	sq. ft.
Prescription	467— 4.8%	510— 6.0%
Other	9,222— 95.2%	7,990— 94.0%
Total	9,689—100.0%	8,500—100.0%
SALES PER SQUARE FOOT		
Prescription	$1,271.68	$1,505.78
Other	211.38	243.98
Total	262.49	319.69
SALES PER DOLLAR INVESTED IN INVENTORY		
Prescription	$12.86	$12.20
Other	6.17	6.01
Net profit per dollar invested in inventory	$0.35	$0.34
PRESCRIPTIONS DISPENSED		
New	26,547— 55.6%	27,184— 56.0%
Renewed	21,192— 44.4%	21,359— 44.0%
Total	47,739—100.0%	48,543—100.0%
PRESCRIPTION CHARGE	$12.44	$15.82
NUMBER OF HOURS PER WEEK		
Pharmacy was open	81 hours	81 hours
Worked by manager	45 hours	45 hours
Worked by employed pharmacist	81 hours	81 hours

*Forecasts were made from income statements submitted to NACDS-Lilly Digest between 1971 and 1983. The reader should use caution in interpreting the results of this forecast because only 13 years of data were used.

Commentary

Looking to the Future

Robert J. Bolger*

Increased competition, a shifting population, and changing socioeconomic conditions have created a new environment for the drugstore industry. Consumer attitudes and buying behavior have changed dramatically, and the industry has adapted. Twenty-five years ago, the typical drugstore contained only four or five core departments—the prescription center, health and beauty aids, tobacco, sundries, and the soda fountain. Today's chain drug unit, faced with increased competition from mass merchandisers and other retailers, has emerged as a full-line retail outlet. Demand for a more diversified product line has created a drugstore which now consists of as many as a dozen departments.

Health care in the 1980's differs substantially from what it was ten years ago, and in the twenty-first century, it will differ substantially from what it is today. Emerging key health care trends, reacting with the political, socioeconomic, and scientific conditions, will certainly influence the future direction of pharmacy. Scientific advances and improved medical information systems will change therapies and expand drug delivery systems. Health promotion and self-care have lead to the introduction of organizations designed to keep people well rather than to treat illness. Furthermore, it is probable that the trend toward cost-containment and cost-management, pursued by both federal and state governments and by employers and insurers alike, will alter the way in which health care is purchased.

Since its introduction in 1970, the NACDS-LILLY DIGEST has been helpful in keeping chain managers, the United States government, and pharmacy faculties and students abreast of the dynamics of the chain drug industry. In fact, the DIGEST is the only publication of its kind presenting a statistical profile of chain pharmacies.

The National Association of Chain Drug Stores is proud to share in the publication of the NACDS-LILLY DIGEST. Without the continuous support of Eli Lilly and Company, the DIGEST would not be available. On behalf of the NACDS and its Board of Directors, I would like to extend my deep appreciation to everyone who made it possible.

*Robert J. Bolger, President, National Association of Chain Drug Stores, Inc.

The Self-Analysis Section of the NACDS-Lilly Digest

This section contains 22 summaries of operating averages arranged according to both annual sales volume and daily prescription activity (Tables 10 through 12).

A generally accepted accounting format is used to display the operating data so that comparisons can be made with any pharmacy's figures.

TABLE 10 Sales under $1,500,000

AVERAGES PER PHARMACY	TOTAL SALES Under $750,000 (75 Pharmacies)	TOTAL SALES $750,000 to $1,000,000 Under 50 Prescriptions Daily (26 Pharmacies)	50 to 75 Prescriptions Daily (37 Pharmacies)	Over 75 Prescriptions Daily (42 Pharmacies)
SALES				
Prescription	$191,002— 36.6%	$167,745— 19.4%	$268,962— 31.0%	$403,033— 45.2%
Other	330,745— 63.4%	695,801— 80.6%	597,307— 69.0%	488,218— 54.8%
Total	$521,747—100.0%	$863,546—100.0%	$866,269—100.0%	$891,251—100.0%
COST OF GOODS SOLD	369,539— 70.8%	615,037— 71.2%	609,185— 70.3%	629,965— 70.7%
GROSS MARGIN	$152,208— 29.2%	$248,509— 28.8%	$257,084— 29.7%	$261,286— 29.3%
EXPENSES				
Manager's salary	$ 28,385— 5.4%	$ 30,223— 3.5%	$ 30,920— 3.6%	$ 31,877— 3.6%
Employees' wages	59,363— 11.4%	98,443— 11.4%	92,553— 10.7%	83,362— 9.4%
Rent	24,934— 4.8%	35,317— 4.1%	29,123— 3.4%	25,136— 2.8%
Utilities (including telephone)	10,075— 1.9%	14,034— 1.6%	13,255— 1.5%	12,066— 1.4%
Insurance, licenses, and taxes (except on profit)	10,332— 2.0%	13,356— 1.5%	17,144— 2.0%	16,351— 1.8%
Repairs	2,221— 0.4%	4,056— 0.5%	2,795— 0.3%	2,944— 0.3%
Advertising	11,549— 2.2%	20,171— 2.3%	21,337— 2.4%	15,825— 1.8%
Depreciation (except on buildings)	5,604— 1.1%	9,502— 1.1%	6,083— 0.7%	5,098— 0.6%
Supplies	5,086— 1.0%	6,827— 0.8%	7,027— 0.8%	8,248— 0.9%
Headquarters fee	18,761— 3.6%	31,472— 3.7%	25,774— 3.0%	35,036— 3.9%
All other direct store expenses	12,209— 2.3%	16,618— 1.9%	17,768— 2.1%	14,672— 1.6%
	14.5%	13.4%	12.8%	12.3%
Total	$188,519— 36.1%	$280,019— 32.4%	$263,779— 30.5%	$250,615— 28.1%
NET PROFIT (before taxes)	($ 36,311— 6.9%)	($ 31,510— 3.6%)	($ 6,695— 0.8%)	$ 10,671— 1.2%
Value of inventory at cost and as a percent of sales				
Prescription	$ 27,746— 14.5%	$ 24,736— 14.7%	$ 28,571— 10.6%	$ 36,057— 8.9%
Other	103,914— 31.4%	150,949— 21.7%	152,531— 25.5%	110,621— 22.7%
Total	$131,660— 25.2%	$175,685— 20.3%	$181,102— 20.9%	$146,678— 16.5%
Annual rate of turnover of inventory	2.8 times	3.6 times	3.5 times	4.5 times
Size of area and sales per square foot*	sq. ft.	sq. ft.	sq. ft.	sq. ft.
Prescription	350 $545.72	293 $567.35	414 $656.94	372 $ 43.72
Other	4,306 76.81	5,950 117.15	6,078 97.77	4,542 110.80
Total	4,656 112.06	6,243 138.29	6,492 133.43	4,914 181.42
SALES PER DOLLAR INVESTED IN INVENTORY				
Prescription	$6.88	$6.78	$9.41	$11.18
Other	3.18	4.61	3.92	4.41
Net profit per dollar invested in inventory	($0.276)	($0.180)	($0.040)	$0.070
PRESCRIPTIONS DISPENSED				
New	8,401— 50.7%	6,853— 52.9%	11,550— 50.8%	17,233— 49.6%
Renewed	8,183— 49.3%	6,100— 47.1%	11,208— 49.2%	17,517— 50.4%
Total	16,584—100.0%	12,953—100.0%	22,758—100.0%	34,750—100.0%
PRESCRIPTION CHARGE	$11.52	$12.95	$11.82	$11.60
NUMBER OF HOURS PER WEEK				
Pharmacy was open	73 hours	82 hours	80 hours	78 hours
Worked by manager	48 hours	47 hours	46 hours	46 hours
Worked by employed pharmacist(s)	36 hours	57 hours	49 hours	44 hours

*Based on averages of pharmacies that reported all data

TOTAL SALES
$1,000,000 to $1,500,000

Under 75 Prescriptions Daily (65 Pharmacies)	75 to 100 Prescriptions Daily (85 Pharmacies)	Over 100 Prescriptions Daily (106 Pharmacies)
$ 253,122— 21.0%	$ 385,989— 31.5%	$ 537,051— 42.1%
949,479— 79.0%	839,778— 68.5%	737,264— 57.9%
$1,202,601—100.0%	$1,225,767—100.0%	$1,274,315—100.0%
855,254— 71.1%	872,256— 71.2%	877,884— 68.9%
$ 347,347— 28.9%	$ 353,511— 28.8%	$ 396,431— 31.1%
$ 29,891— 2.5%	$ 30,374— 2.5%	$ 33,802— 2.7%
123,768— 10.3%	117,051— 9.5%	118,068— 9.3%
42,894— 3.6%	34,804— 2.8%	29,213— 2.3%
17,725— 1.5%	16,169— 1.3%	14,959— 1.2%
21,810— 1.8%	19,573— 1.6%	19,193— 1.5%
4,920— 0.4%	3,871— 0.3%	4,368— 0.3%
27,043— 2.2%	23,793— 2.0%	23,586— 1.8%
10,879— 0.9%	8,291— 0.7%	5,733— 0.4%
8,231— 0.7%	8,778— 0.7%	8,791— 0.7%
36,145— 3.0%	42,955— 3.5%	50,918— 4.0%
26,525— 2.2%	22,195— 1.8%	18,739— 1.5%
12.7%	11.9%	11.4%
$ 349,831— 29.1%	$ 327,854— 26.7%	$ 327,370— 25.7%
($ 2,484— 0.2%)	$ 25,657— 2.1%	$ 69,061— 5.4%
$ 31,760— 12.5%	$ 37,105— 9.6%	$ 42,097— 7.8%
203,526— 21.4%	163,336— 19.5%	153,196— 20.8%
$ 235,286— 19.6%	$ 200,441— 16.4%	$ 195,293— 15.3%
3.8 times	4.4 times	4.6 times
sq. ft.	sq. ft.	sq. ft.
478 $541.28	371 $ 40.53	365 $454.04
7,288 128.79	6,140 136.77	6,126 121.56
7,766 154.16	6,511 188.26	6,491 196.48
$7.97	$10.40	$12.76
4.67	5.14	4.81
($0.010)	$0.130	$0.350
10,117— 49.1%	16,055— 50.7%	22,937— 50.0%
10,490— 50.9%	15,600— 49.3%	22,931— 50.0%
20,607—100.0%	31,655—100.0%	45,868—100.0%
$12.28	$12.19	$11.71
79 hours	79 hours	81 hours
47 hours	46 hours	46 hours
65 hours	71 hours	61 hours

TABLE 11 Sales $1,500,000 to $2,500,000

AVERAGES PER PHARMACY	TOTAL SALES $1,500,000 to $2,000,000	Under 75 Prescriptions Daily (45 Pharmacies)	75 to 100 Prescriptions Daily (43 Pharmacies)	100 to 150 Prescriptions Daily (87 Pharmacies)	Over 150 Prescriptions Daily (55 Pharmacies)
SALES					
Prescription		$ 273,181— 15.9%	$ 374,559— 21.6%	$ 531,862— 30.9%	$ 783,684— 43.8%
Other		1,449,378— 84.1%	1,363,354— 78.4%	1,191,778— 69.1%	1,005,908— 56.2%
Total		$1,722,559—100.0%	$1,737,913—100.0%	$1,723,640—100.0%	$1,789,592—100.0%
COST OF GOODS SOLD		1,269,919— 73.7%	1,249,880— 71.9%	1,207,005— 70.0%	1,206,411— 67.4%
GROSS MARGIN		$ 452,640— 26.3%	$ 488,033— 28.1%	$ 516,635— 30.0%	$ 583,181— 32.6%
EXPENSES					
Manager's salary		$ 28,817— 1.7%	$ 28,032— 1.6%	$ 29,737— 1.7%	$ 34,880— 1.9%
Employees' wages		180,108— 10.5%	174,644— 10.0%	165,517— 9.6%	148,473— 8.3%
Rent		68,505— 4.0%	51,810— 3.0%	42,008— 2.4%	44,157— 2.5%
Utilities (including telephone)		28,742— 1.7%	23,474— 1.4%	19,220— 1.1%	18,778— 1.0%
Insurance, licenses, and taxes (except on profit)		25,242— 1.4%	28,573— 1.7%	27,738— 1.6%	26,584— 1.4%
Repairs		9,754— 0.5%	6,418— 0.4%	5,736— 0.4%	7,696— 0.4%
Advertising		33,788— 2.0%	36,137— 2.1%	32,522— 1.9%	38,659— 2.2%
Depreciation (except on buildings)		15,013— 0.9%	11,172— 0.6%	8,549— 0.5%	8,358— 0.5%
Supplies		9,249— 0.5%	8,972— 0.5%	10,935— 0.7%	10,889— 0.6%
Headquarters fee		38,034— 2.2%	43,751— 2.5%	62,461— 3.6%	94,948— 5.3%
All other direct store expenses		34,495— 2.0%	38,028— 2.2%	33,236— 1.9%	19,043— 1.1%
		11.2%	11.4%	11.7%	12.5%
Total		$ 471,747— 27.4%	$ 451,011— 26.0%	$ 437,659— 25.4%	$ 452,465— 25.2%
NET PROFIT (before taxes)		($ 19,107— 1.1%)	$ 37,022— 2.1%	$ 78,976— 4.6%	$ 130,716— 7.4%
Value of inventory at cost and as a percent of sales					
Prescription		$ 28,510— 10.4%	$ 33,750— 9.0%	$ 42,901— 8.1%	$ 59,009— 7.5%
Other		261,269— 18.0%	249,817— 18.3%	210,753— 17.7%	199,266— 19.8%
Total		$ 289,779— 16.8%	$ 283,567— 16.3%	$ 253,654— 14.7%	$ 258,275— 14.4%
Annual rate of turnover of inventory		4.4 times	4.5 times	4.8 times	4.7 times
Size of area and sales per square foot*		sq. ft.	sq. ft.	sq. ft.	sq. ft.
Prescription		615 $473.89	520 $727.26	447 $188.86	351 $131.80
Other		10,497 136.32	8,421 161.85	6,618 180.37	6,474 159.34
Total		11,112 155.01	8,941 194.76	7,065 244.19	6,825 260.65
SALES PER DOLLAR INVESTED IN INVENTORY					
Prescription		$9.58	$11.10	$12.40	$13.28
Other		5.55	5.46	5.65	5.05
Net profit per dollar invested in inventory		($0.070)	$0.130	$0.310	$0.510
PRESCRIPTIONS DISPENSED					
New		10,681— 48.7%	15,686— 49.4%	22,733— 51.4%	32,485— 49.3%
Renewed		11,255— 51.3%	16,049— 50.6%	21,462— 48.6%	33,465— 50.7%
Total		21,936—100.0%	31,735—100.0%	44,195—100.0%	65,950—100.0%
PRESCRIPTION CHARGE		$12.45	$11.80	$12.03	$11.88
NUMBER OF HOURS PER WEEK					
Pharmacy was open		79 hours	80 hours	84 hours	83 hours
Worked by manager		48 hours	47 hours	46 hours	45 hours
Worked by employed pharmacist(s)		66 hours	81 hours	77 hours	69 hours

*Based on averages of pharmacies that reported all data

TOTAL SALES $2,000,000 to $2,500,000

Under 100 Prescriptions Daily (60 Pharmacies)	100 to 150 Prescriptions Daily (75 Pharmacies)	Over 150 Prescriptions Daily (56 Pharmacies)
$ 331,737— 15.0%	$ 519,996— 23.3%	$ 807,189— 35.1%
1,877,495— 85.0%	1,714,853— 76.7%	1,489,798— 64.9%
$2,209,232—100.0%	$2,234,849—100.0%	$2,296,987—100.0%
1,622,870— 73.5%	1,613,184— 72.2%	1,576,596— 68.6%
$ 586,362— 26.5%	$ 621,665— 27.8%	$ 720,391— 31.4%
$ 33,188— 1.5%	$ 29,033— 1.3%	$ 32,809— 1.4%
212,985— 9.6%	214,747— 9.6%	195,431— 8.5%
66,867— 3.0%	59,865— 2.7%	61,647— 2.7%
34,465— 1.6%	29,251— 1.3%	24,733— 1.1%
39,186— 1.8%	38,350— 1.7%	33,645— 1.5%
11,551— 0.5%	8,284— 0.4%	8,809— 0.3%
32,505— 1.5%	31,360— 1.4%	53,106— 2.3%
15,765— 0.7%	13,151— 0.6%	11,241— 0.5%
13,175— 0.6%	13,049— 0.6%	12,772— 0.6%
47,592— 2.1%	54,857— 2.5%	108,590— 4.7%
40,895— 1.9%	45,975— 2.0%	38,204— 1.7%
10.7%	10.5%	12.7%
$ 548,174— 24.8%	$ 537,922— 24.1%	$ 580,987— 25.3%
$ 38,188— 1.7%	$ 83,743— 3.7%	$ 139,404— 6.1%
$ 32,801— 9.9%	$ 41,857— 8.0%	$ 56,772— 7.0%
316,544— 16.9%	275,599— 16.1%	270,399— 18.2%
$ 349,345— 15.8%	$ 317,456— 14.2%	$ 327,171— 14.2%
4.8 times	5.2 times	4.9 times
sq. ft.	sq. ft.	sq. ft.
578 $600.09	517 $ 42.07	466 $571.73
11,571 161.27	8,746 193.87	8,296 191.34
12,149 182.15	9,263 241.21	8,762 264.77
$10.11	$12.42	$14.22
5.93	6.22	5.51
$0.110	$0.260	$0.430
15,058— 53.2%	22,402— 50.8%	35,360— 51.8%
13,260— 46.8%	21,683— 49.2%	32,841— 48.2%
28,318—100.0%	44,085—100.0%	68,201—100.0%
$11.71	$11.80	$11.84
85 hours	85 hours	84 hours
46 hours	47 hours	45 hours
82 hours	86 hours	80 hours

TABLE 12 Sales Over $2,500,000

AVERAGES PER PHARMACY	TOTAL SALES $2,500,000 to $3,000,000 — Under 100 Prescriptions Daily (29 Pharmacies)	TOTAL SALES $2,500,000 to $3,000,000 — 100 to 150 Prescriptions Daily (61 Pharmacies)	TOTAL SALES $2,500,000 to $3,000,000 — Over 150 Prescriptions Daily (55 Pharmacies)	TOTAL SALES $3,000,000 to $4,000,000 — Under 150 Prescriptions Daily (64 Pharmacies)
SALES				
Prescription	$ 339,754— 12.6%	$ 530,773— 19.5%	$ 872,206— 31.9%	$ 508,161— 15.2%
Other	2,347,115— 87.4%	2,193,294— 80.5%	1,865,800— 68.1%	2,845,005— 84.8%
Total	$2,686,869—100.0%	$2,724,067—100.0%	$2,738,006—100.0%	$3,353,166—100.0%
COST OF GOODS SOLD	1,965,225— 73.1%	2,020,568— 74.2%	1,913,919— 69.9%	2,461,958— 73.4%
GROSS MARGIN	$ 721,644— 26.9%	$ 703,499— 25.8%	$ 824,087— 30.1%	$ 891,208— 26.6%
EXPENSES				
Manager's salary	$ 34,410— 1.3%	$ 32,751— 1.2%	$ 33,056— 1.2%	$ 36,484— 1.1%
Employees' wages	238,147— 8.9%	248,279— 9.1%	239,548— 8.7%	269,238— 8.0%
Rent	96,114— 3.6%	63,768— 2.3%	65,745— 2.4%	88,800— 2.7%
Utilities (including telephone)	42,563— 1.6%	36,415— 1.3%	29,173— 1.1%	40,914— 1.2%
Insurance, licenses, and taxes (except on profit)	50,824— 1.9%	43,049— 1.6%	36,635— 1.3%	49,622— 1.5%
Repairs	14,497— 0.5%	11,102— 0.4%	10,183— 0.4%	14,248— 0.4%
Advertising	39,231— 1.5%	40,761— 1.5%	54,570— 2.0%	48,276— 1.4%
Depreciation (except on buildings)	31,860— 1.2%	17,443— 0.7%	13,181— 0.5%	24,024— 0.7%
Supplies	13,637— 0.5%	15,843— 0.6%	13,779— 0.5%	19,263— 0.6%
Headquarters fee	62,753— 2.3%	53,598— 2.0%	103,420— 3.8%	96,732— 2.9%
All other direct store expenses	36,100— 1.3%	41,505— 1.5%	45,888— 1.7%	29,891— 0.9%
	10.8%	9.6%	11.3%	9.6%
Total	$ 660,136— 24.6%	$ 604,514— 22.2%	$ 645,178— 23.6%	$ 717,492— 21.4%
NET PROFIT (before taxes)	$ 61,508— 2.3%	$ 98,985— 3.6%	$ 178,909— 6.5%	$ 173,716— 5.2%
Value of inventory at cost and as a percent of sales				
Prescription	$ 34,526— 10.2%	$ 43,853— 8.3%	$ 62,933— 7.2%	$ 43,285— 8.5%
Other	339,687— 14.5%	331,205— 15.1%	289,434— 15.5%	373,536— 13.1%
Total	$ 374,213— 13.9%	$ 375,058— 13.8%	$ 352,367— 12.9%	$ 416,821— 12.4%
Annual rate of turnover of inventory	5.4 times	5.5 times	5.5 times	5.9 times
Size of area and sales per square foot*	sq. ft.	sq. ft.	sq. ft.	sq. ft.
Prescription	376 $933.53	528 $ 54.58	503 $629.48	512 $992.50
Other	11,232 206.50	10,633 202.68	9,359 205.60	11,721 242.73
Total	11,608 230.05	11,161 242.97	9,862 278.20	12,233 274.11
SALES PER DOLLAR INVESTED IN INVENTORY				
Prescription	$9.84	$12.10	$13.86	$11.74
Other	6.91	6.62	6.45	7.62
Net profit per dollar invested in inventory	$0.160	$0.260	$0.510	$0.417
PRESCRIPTIONS DISPENSED				
New	15,934— 56.3%	23,419— 51.9%	39,614— 53.6%	22,625— 52.6%
Renewed	12,372— 43.7%	21,671— 48.1%	34,350— 46.4%	20,382— 47.4%
Total	28,306—100.0%	45,090—100.0%	73,964—100.0%	43,007—100.0%
PRESCRIPTION CHARGE	$12.00	$11.77	$11.79	$11.82
NUMBER OF HOURS PER WEEK				
Pharmacy was open	83 hours	86 hours	84 hours	85 hours
Worked by manager	49 hours	47 hours	45 hours	46 hours
Worked by employed pharmacist(s)	81 hours	86 hours	90 hours	87 hours

*Based on averages of pharmacies that reported all data

				TOTAL SALES Over $4,000,000			
150 to 200 Prescriptions Daily (58 Pharmacies)		Over 200 Prescriptions Daily (34 Pharmacies)		Under 200 Prescriptions Daily (59 Pharmacies)		Over 200 Prescriptions Daily (65 Pharmacies)	
$ 728,647—	21.0%	$1,000,940—	29.4%	$ 675,503—	12.6%	$1,254,615—	20.1%
2,747,397—	79.0%	2,404,470—	70.6%	4,698,209—	87.4%	4,990,617—	79.9%
$3,476,044—	100.0%	$3,405,410—	100.0%	$5,373,712—	100.0%	$6,245,232—	100.0%
2,552,446—	73.4%	2,430,241—	71.4%	3,965,023—	73.8%	4,566,139—	73.1%
$ 923,598—	26.6%	$ 975,169—	28.6%	$1,408,689—	26.2%	$1,679,093—	26.9%
$ 33,006—	1.0%	$ 34,545—	1.0%	$ 49,892—	0.9%	$ 58,529—	0.9%
288,283—	8.3%	271,568—	8.0%	432,182—	8.1%	517,495—	8.3%
72,204—	2.1%	75,112—	2.2%	141,868—	2.6%	121,741—	2.0%
38,663—	1.1%	30,596—	0.9%	59,865—	1.1%	47,861—	0.8%
48,307—	1.4%	40,148—	1.2%	66,137—	1.2%	59,712—	1.0%
11,957—	0.3%	8,812—	0.2%	21,991—	0.4%	15,984—	0.2%
44,529—	1.3%	59,334—	1.8%	104,767—	2.0%	85,487—	1.4%
24,789—	0.7%	15,474—	0.4%	35,025—	0.7%	27,721—	0.4%
20,237—	0.6%	19,171—	0.6%	24,444—	0.4%	34,908—	0.6%
122,379—	3.5%	134,039—	3.9%	104,463—	1.9%	149,833—	2.4%
15,288—	0.4%	44,497—	1.3%	73,621—	1.4%	51,568—	0.8%
9.3%		10.3%		9.1%		7.6%	
$ 719,642—	20.7%	$ 733,296—	21.5%	$1,114,255—	20.7%	$1,170,839—	18.8%
$ 203,956—	5.9%	$ 241,873—	7.1%	$ 294,434—	5.5%	$ 508,254—	8.1%
$ 51,198—	7.0%	$ 65,807—	6.6%	$ 47,275—	7.0%	$ 74,892—	6.0%
332,545—	12.1%	312,273—	13.0%	535,105—	11.4%	475,828—	9.5%
$ 383,743—	11.0%	$ 378,080—	11.1%	$ 582,380—	10.8%	$ 550,720—	8.8%
6.6 times		6.4 times		6.8 times		8.3 times	
sq. ft.		sq. ft.		sq. ft.		sq. ft.	
462	$1,577.16	495	$2,022.10	535	$1,262.62	504	$2,489.32
11,549	237.89	9,036	266.10	19,521	240.67	13,634	366.04
12,011	289.41	9,531	357.30	20,056	267.94	14,138	441.73
	$14.23		$15.21		$14.29		$16.75
	8.26		7.70		8.78		10.49
	$0.532		$0.639		$0.506		$0.923
34,375—	54.7%	44,274—	51.7%	29,053—	53.7%	55,640—	53.5%
28,509—	45.3%	41,400—	48.3%	25,043—	46.3%	48,332—	46.5%
62,884—	100.0%	85,674—	100.0%	54,096—	100.0%	103,972—	100.0%
	$11.59		$11.68		$12.49		$12.07
	89 hours		84 hours		87 hours		90 hours
	47 hours		44 hours		48 hours		45 hours
	97 hours		92 hours		104 hours		120 hours

Conclusion

Chain drugstore firms have been aware of the economic importance of cost control for some time. The current business environment for these corporations includes additional forms of competition which seek to capture an increasing share of the consumer's health care dollar. The expansion of Health Maintenance Organizations, the emergence of Preferred Provider Organizations, and the entry of hospital corporations are impacting the retail sector of pharmacy practice. During 1984, both average total sales volume and net profit dollars established new records among NACDS-LILLY DIGEST participants. However, net profit as a share of the sales dollar declined, the result of an increase in the cost of goods sold.

Since the overall upward trend in operating costs is not expected to lessen in the near future and competition in the marketplace is becoming more intense—it is vital that chain management continue to be aggressive in implementing cost-control procedures at the store level so that the desired profit goal will be attained.

Comparative evaluations with similar operations should assist managers in the decision-making process. It is hoped that the NACDS-LILLY DIGEST will provide one tool for the productive analysis of a chain unit's performance.